· .	1	Recei	ving Kep	ort		1
	ate: 13/1/F upplier: 14/60	? S	Batcl Dart	h No: <u>M</u> P/O: <u>Q</u>	1263 0036	90
Packing Slip: Invoice: Receipt: Discrepancies	Yes No Yes No Cash Cr	y S	telease Note A Vaybill Attache hipment Com C6 Inspection Vork Order	Attached: You	es N	N/A N/A N/A
Part Number	Description	antity dered	Quantity Received	Quantity Returned	Quantity Short	Comments
M70781	6B/6WX	150 ).	20	C	12	
				•		
(1)				-		
Production/Adi Date Received/Cost Initial	<u> 131)/17</u>	Initials	of receiver (	if shipment	OK) Level	



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Tel: 613 632 9577 Fax: 613 632 1053

## **PURCHASE ORDER**

### Purchase Order ID PO20536

Purchase Order Date 7/11/2013 PO Print Date 7/12/2013

Page Number 1 of 3

Order From:

VC-COP001

THYSSENKRUPP MATERIALS CA LTD O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A" TORONTO, ON M5W 5V8 CA

DART AEROSPACE LTD Ship To:

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

**CANADA** 

**Contact Name** 

Vendor Phone

905 669 9444

Buyer

Chantal Lavoie

Yours ppd

**Customer POID** Customer Tax #

**Ship To Contact** 

Ship Via:

Ship Acct:

Ship To Phone

Terms Currency

10127-2607 Net 30

CAD

**FOB** 

Destination-Collect

n 1263 Line Reference Description/ Req Date/ Reg Oty/ List Price Disc Discounted Extended Mfg ID Taxable Vendor Part Number Unit of **Unit Price** Price Measure **Line Comments Promise Date Delivery Comments** M7075T6B0.375X3.000 7075-T6 BAR 0.375" X 7/23/2013 12.00 \$165.00 3.000" Yes

MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-A-200/11 OR CUT FROM PLATE QQ-A-250/12

Line Total:

\$165.00

M7075T6B0.375X8.000

7075-T6 BAR 0.375" X

8.000"

7/23/2013

Yes

7/23/2013

43/1/9

\$490.00

SAME AS ABOVE

7/23/2013

Line Total:

\$490.00

Note:



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Tel: 613 632 9577 Fax: 613 632 1053

### **PURCHASE ORDER**

Purchase Order ID PO20536

Purchase Order Date 7/11/2013 PO Print Date 7/12/2013

Page Number 2 of 3

Order From:

VC-COP001

THYSSENKRUPP MATERIALS CA LTD O/A VPK METAL- C/O T27540/PO BOX 4275, POSTAL"A" TORONTO, ON M5W 5V8 CA

DART AEROSPACE LTD. Ship To:

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

**CANADA** 

**Contact Name** Vendor Phone

905 669 9444

Buyer **Customer POID** Customer Tax #

Chantal Lavoie

Ship To Contact Ship To Phone

Ship Via:

Terms Currency

10127-2607 Net 30 CAD

Ship Acct:

Yours ppd

FOB

Destination-Collect

M7075T6B1.500X1.500

7075 T6 BAR 1.500 x 1.500

7/23/2013

12.00

\$235.00

SAME AS ABOVE

Yes

7/23/2013

Line Total:

\$235.00

M7075T6B1.500X8.500

7075-T6 BAR 1.500' X 8.500"

7/23/2013

Yes

\$849.52

SAME AS ABOVE

7/23/2013

Line Total:

\$849.52

M7075T6B2.250X02.750

7075-T6 BAR 2.250' X

2.750"

7/23/2013

\$1,194.00

SAME AS ABOVE

Yes

7/23/2013

Line Total:

\$1,194.00

Note:



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Tel: 613 632 9577 Fax: 613 632 1053

### **PURCHASE ORDER**

### Purchase Order ID PO20536

Purchase Order Date 7/11/2013 PO Print Date 7/12/2013

Page Number 3 of 3

Order From:

VC-COP001

Ship To: DART AEROSPACE LTD

THYSSENKRUPP MATERIALS CA LTD

O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A" TORONTO, ON M5W 5V8

CA

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

**CANADA** 

**Contact Name** 

Vendor Phone

905 669 9444

Buyer

Chantal Lavoie

Destination-Collect

Yours ppd

Customer POID Customer Tax #

10127-2607

Ship To Contact

Ship To Phone Ship Via:

Terms Currency FOB

Net 30 CAD

Ship Acct:

7/23/2013

M7075T6B4.000X4.500

7075-T6 BAR 4.000' X 4.500"

12.00

SAME AS ABOVE

7/23/2013

Yes

Line Total:

\$1,155.00

\$1,155.00

M7075T6B1.000X1.000

7075 T6 BAR 1.00 x1.00

7/23/2013

\$111.00

SAME AS ABOVE

Yes 7/23/2013

Line Total:

\$111.00

M7075T6B5.000X0.375

SAME AS ABOVE

7075-T6 BAR 5.000" X

\$465.00

0.375"

7/23/2013

Yes 7/23/2013

Line Total:

\$465.00

PO Total:

\$4,664.52

Note: Pricing listed above is as per contract agreement between Dart Aerospace and the respective manufacturer.

No substitution or deviation without consent.

Change Nbr:

**Change Date:** 

7/12/2013

Certificate of Conformity or Material Certification required -YES

NO





http://Online.KaiserAluminum.com

Kaiser Aluminum Trentwood Works Spokane, WA 99215-5108 (800) 367-2586

CUSTOMER PO NUMBER:		WORK PACKAG	E:	CUSTOMER PART	NUMBER:	PROD	UCT DESCRIPTION	DN:		
5400106640-0060		÷		ALFLR00984	-60.5	Saw	ed Plate		.674)	
KAISER ORDER NUMBER:	LINE ITEM	!	SHIP DA	ATE:	ALLOY:		CLAD:		TEMPER:	
1120519	5		10/03	/2011	7075		BARE		T651	
WEIGHT SHIPPED:	QUANTITY	:	B/L NUN	MBER:	GAUGE:	i	WIDTH:		LENGTH:	
4758 LB	14 PCS	EST.	20339	942	0.3750 IN	•	60.500 IN		144.500 IN	100
SHIP TO:	•				SOLD TO:	· · · · · · · · · · · · · · · · · · ·	1			
COPPER & BRASS 5450 EAST HOME FRESNO, CA 9372			1 -	- · · · · · · ·	COPPER & BF ATTN: ACCOU P.O. Box 5116 SOUTHFIELD	JNTS	PAYABLE			
					· ř					

MHU 1526136: LOT 559802A4: 14 pieces

## Certified Specifications

AMS 4045/RevK AMS-QQ-A-250/12 ASTM B 209/Rev07

Test Code: 1512

Test Results:

LOT: 559802A4 CAST: 414 DROP: 28 INGOT: 4

Melted in USA (ASTM E8/B557) (EN 2002-1)

Tensile: Temper

Dir/#Tests

Ultimate KSI (MPA) Yield KSI (MPA) Elongation %

LT / 02 (Min:Max) 83.7 : 83.9 72.8 : 72.8

13.5 : 14.7

(577 : 578)(502 : 502)

(ASTM E1251)

Chemistry:

SI FE CU 0.08 0.17 1.4

MN MG 0.02 2.4 0.19

CR ZN ΤI V

ZR5.5 0.03 0.01 0.01

on 13/07/22

OTHER

Chemistry: 7075

SI MIN 0.00

FE ÇÜ MN MG 0.00 1.2 0.00 2.1 0.50 2.0 0.30 2.9 0.28

CR 2N0.18 5.1

0.00 0.00 0.00 MAX

6.1 0.20 0.05 0.05 Aluminum Remainder

Plant Serial: 4240789

Kaiser Order Number: 1120519

Line Item: 5

Page 1 of 2

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD Del.: 2402583660

CstAr

Wgt.: 17.000 LB

CstOr 250159

Date 07/13/2013





http://Online.KaiserAluminum.com

Kaiser Aluminum Trentwood Works Spokane, WA 99215-5108 (800) 367-2586

#### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser) hereby certifies that metal shipped under this order was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. This material has been inspected, tested and found in conformance with the requirements of the applicable specifications as indicated herein. For materialthicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. All metal which is solution heat treated complies with AMS 2772. Any warranty is limited to that shown on Kaiser's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of Kaiser Aluminum Fabricated Products, LLC laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony underfederal law. ISO-9001:2000 certified.

MIKE KLOCKE, LABORATORIES SUPERVISOR

Plant Serial: 4240789

Kaiser Order Number: 1120519

Line Item: 5

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD

Page 2 of 2

Date 07/13/2013

CstAr CstOr 250159 Wgt.: 17.000 LB

hik Jantet.

FORM: 1006

## **WORKORDER:**

2402583660

# **COPPER AND BRASS SALES**

MATERIAL TYPE

# **ALUMINIUM ALLOYS**

## PRODUCT DESIGNATION

2014 2024 2224 2324 7050 7075 7150 7175 7475 ALUMEC 89 ALUMEC 99 QC-7

### "WARNING"

SMALL CHIPS, FINE TURNINGS AND DUST MAY IGNITE READILY. EXPLOSION POTENTIAL MAY BE PRESENT WHEN; DUST OR FINES ARE DISPERSED IN THE AIR; FINE, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH CERTAIN METAL OXIDES; OR, CHIPS, FINES, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH WATER OR MOISTURE. KEEP AWAY FROM IGNITION SOURCE. USE EXPLOSION-PROOF VENTILATION. KEEP MATERIAL DRY.

THIS PRODUCT CONTAINS BERYLLIUM AND COPPER.INHALING BERYLLIUM DUST OR FUMES MAY CAUSE CHRONIC BERYLLIUM DISEASE (CBD), A SERIOUS CHRONIC LUNGDISEASE IN SOME INDIVIDUALS.BERYLLIUM IS A CANCER HAZARD; OVER TIME CBDAND CANCER CAN BE FATAL, TARGET ORGAN IS PRIMARILY THE LUNG.INHALING LARGE AMOUNTS OF COPPER, MAGNESIUM OXIDE, MANGANESE OXIDE, ANDZINC OXIDE FUMES OR DUST MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS. CHRONIC OVEREXPOUSURE TO COPPER MAY CAUSE THICKENING OF THE SKIN; AND SKIN, TEETH, AND HAIR DISCOLORATION. CHRONIC OVEREXPOUSURE TOMANGANESE DUST CAN CAUSE CENTRAL NERVOUS SYSTEM DAMAGE, SCARRING OF THELUNGS AND REPRODUCTIVE HARM IN MALES. TARGET ORGAN IS PRIMARILY THE LUNG, BUT REPEATED HIGH EXPOSURE CAN ALSO AFFECT THE LIVER. CHRONICOVEREXPOSURE TO IRON OXIDE DUST/FUME MAY CAUSE LUNG SIDEROSIS. CHRONIC OVEREXPOSURE TO SILICON DUST CAN CAUSE CHRONIC BRONCHITIS. OVEREXPOSURE TO AMORPHOUS SILICA CAN CAUSE DRYING OF THE MUCOUSMEMBRANES OF THE EYES, NOSE, AND THROAT.

THIS PRODUCT ALSO CONTAINS NICKEL AND CHROMIUM COMPOUNDS.INHALATION OF NICKEL DUST OR FUME MAY RESULT IN INFLAMMATION OF THE RESPIRATORY TRACTAND CAUSE NASAL AND/OR LUNG CANCER.NICKEL HAS BEEN IDENTIFIED AS A POTENTIAL HUMAN CARCINOGEN.EXPOSURE TO CHROMIUM DUST OR FUMES MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS AND KIDNEY AND LIVER DAMAGE.UNDER HIGH TEMPERATURES,HEXAVALENT CHROMIUM MAY BE PRODUCED,IF IN THEINSOLUBLE FORM,IT IS A CONFIRMED HUMAN CARCINOGEN.(CALIFORNIA PROPOSITION 65).

IF COATED WITH OIL, MAY CAUSE SKIN IRRITATION/DERMATITIS BY CONTACT. WELDING FUME IS LISTED AS A POSSIBLE CARCINOGENIC TO HUMANS.

READ THE ALUMINIUM/ALUMINIUM ALLOYS MATERIAL SAFETY DATA SHEET (MSDS) ON FILE WITH YOUR EMPLOYER BEFORE WORKING WITH THIS MATERIAL.

- \* If processing or recycling produces particulate, use exhaust ventilation or other controls designed to prevent exposure to workers. Examples of such activities include melting, welding, grinding, abrasive sawing, sanding and polishing. Any activity which abrades the surface of this material can generate airborne particulate. Use appropriate NIOSH approved respiratory protection (P95; P100 for lead with, quantitative fit testing required) if exposures exceed the permissible limits.
- \* The Occupational Safety and Health Administration (OSHA) have set mandatory limits on occupational exposures.
- \* Aluminum, in solid form and as contained in finished products presents no special health risk.
- \* Sold for manufacturing purposes only. This product can be recycled; contact your sales representative.

For additional information, call or write to Copper and Brass Sales,22355 West Eleven Mile Road, Southfield, MI 48033,telephone248-233-5600, or visit our web site @ www.copperandbrass.com.

**ALUMINUM LABEL NO. 300-1056** 

ISSUED 10/01/2008





ml 13/07/22

http://Online.KaiserAluminum.com

2

Kaiser Aluminum Trentwood Works Spokane, WA 99215-5108 (800) 367-2586

CUSTOMER PO NUMBER:		WORK PACKAG	Œ:	CUSTOMER	PART	NUMBER:	PROL	OUCT DESCRIPTION:	∞.
5400106640-0060				ALFLROO	984	60.5	Saw	ed Plate	
KAISER ORDER NUMBER:	LINE ITEM	:	SHIP D	ATE:		ALLOY:		CLAD:	TEMPER:
1120519	5		10/03	/2011		7075	69:	BARE	T651
WEIGHT SHIPPED:	QUANTITY	:	B/L NUI	MBER:		GAUGE:		WIDTH:	LENGTH:
4758 LB	14 PCS	EST.	20339	942		0.3750 IN		60.500 IN	144.500 IN
SHIP TO: COPPER & BRASS 5450 EAST HOME FRESNO, CA 9372						SOLD TO: COPPER & B ATTN: ACCO P.O. Box 511 SOUTHFIELD	UNTS 6	PAYABLE	

MHU 1526136: LOT 559802A4: 14 pieces

**Certified Specifications** 

AMS 4045/RevK AMS-QQ-A-250/12 ASTM B 209/Rev07

Test Results:

LOT: 559802A4 CAST: 414 DROP: 28 INGOT: 4

Melted in USA (ASTM E8/B557) (EN 2002-1)

Tensile: Temper Dir/#Tests Ultimate KSI (MPA) Yield KSI (MPA) Elongation %

T651 LT / 02 (Min:Max) 83.7 : 83.9 72.8 : 72.8 13.5 : 14.7

(577 : 578) (502 : 502)

(ASTM E1251)

Test Code: 1512

Chemistry: SI FE CU CR ZNMN MG TI ZR 0.08 0.17 0.02 2.4 5.5 0.03 0.01 0.01 TOT Actual 1.4 0.19

Chemistry: CU SI FE MN MG CR 2NTI ZROTHER 7075 MIN 0.00 0.00 1.2 0.00 2.1 0.18 5.1 0.00 0.00 0.00 0.05 MAX 0.40 0.50 2.0 0.30 2.9 0.28 6.1 0.20 0.05 0.05

Page 1 of 2

Aluminum Remainder

Plant Serial: 4240789

Kaiser Order Number: 1120519

Line Item: 5

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD Del.: 2402583666

CstAr CstOr 250159

Wgt.: 89.000 LB Date 07/13/2013

Solut. Buchetts





http://Online.KaiserAluminum.com

Kaiser Aluminum Trentwood Works Spokane, WA 99215-5108 (800) 367-2586

#### CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC (Kaiser) hereby certifies that metal shipped under this order was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. This material has been inspected, tested and found in conformance with the requirements of the applicable specifications as indicated herein. For materialthicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. All metal which is solution heat treated complies with AMS 2772. Any warranty is limited to that shown on Kaiser's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of Kaiser Aluminum Fabricated Products, LLC laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony underfederal law. ISO-9001:2000 certified.

MIKE KLOCKE, LABORATORIES SUPERVISOR

Plant Serial: 4240789

Kaiser Order Number: 1120519

Line Item: 5

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD Del.: 2402583666

CstAr CstOr 250159

Date 07/13/2013

Page 2 of 2

Wgt.: 89.000 LB

John Jambetts

FORM: 1006

### **WORKORDER:**

2402583666

# **COPPER AND BRASS SALES**

**MATERIAL TYPE** 

# ALUMINIUM ALLOYS

## PRODUCT DESIGNATION

2014 2024 2224 2324 7050 7075 7150 7175 7475 ALUMEC 89 ALUMEC 99 QC-7

### "WARNING"

SMALL CHIPS, FINE TURNINGS AND DUST MAY IGNITE READILY. EXPLOSION POTENTIAL MAY BE PRESENT WHEN: DUST OR FINES ARE DISPERSED IN THE AIR; FINE, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH CERTAIN METAL OXIDES; OR, CHIPS, FINES, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH WATER OR MOISTURE. KEEP AWAY FROM IGNITION SOURCE, USE EXPLOSION-PROOF VENTILATION. KEEP MATERIAL DRY.

THIS PRODUCT CONTAINS BERYLLIUM AND COPPER, INHALING BERYLLIUM DUST OR FUMES MAY CAUSE CHRONIC BERYLLIUM DISEASE (CBD), A SERIOUS CHRONIC LUNGDISEASE IN SOME INDIVIDUALS. BERYLLIUM IS A CANCER HAZARD; OVER TIME CBDAND CANCER CAN BE FATAL, TARGET ORGAN IS PRIMARILY THE LUNG, INHALING LARGE AMOUNTS OF COPPER, MAGNESIUM OXIDE, MANGANESE OXIDE, ANDZINC OXIDE FUMES OR DUST MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS. CHRONIC OVEREXPOUSURE TO COPPER MAY CAUSE THICKENING OF THE SKIN; AND SKIN, TEETH, AND HAIR DISCOLORATION. CHRONIC OVEREXPOUSURE TOMANGANESE DUST CAN CAUSE CENTRAL NERVOUS SYSTEM DAMAGE, SCARRING OF THELUNGS AND REPRODUCTIVE HARM IN MALES. TARGET ORGAN IS PRIMARILY THE LUNG, BUT REPEATED HIGH EXPOSURE CAN ALSO AFFECT THE LIVER. CHRONICOVEREXPOSURE TO IRON OXIDE DUST/FUME MAY CAUSE LUNG SIDEROSIS. CHRONIC OVEREXPOSURE TO SILICON DUST CAN CAUSE CHRONIC BRONCHITIS. OVEREXPOSURE TO AMORPHOUS SILICA CAN CAUSE DRYING OF THE MUCOUSMEMBRANES OF THE EYES, NOSE, AND THROAT.

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IF COATED WITH OIL, MAY CAUSE SKIN IRRITATION/DERMATITIS BY CONTACT. WELDING FUME IS LISTED AS A POSSIBLE CARCINOGENIC TO HUMANS.

READ THE ALUMINIUM/ALUMINIUM ALLOYS MATERIAL SAFETY DATA SHEET (MSDS) ON FILE WITH YOUR EMPLOYER BEFORE WORKING WITH THIS MATERIAL.

- \* If processing or recycling produces particulate, use exhaust ventilation or other controls designed to prevent exposure to workers. Examples of such activities include melting, welding, grinding, abrasive sawing, sanding and polishing. Any activity which abrades the surface of this material can generate airborne particulate. Use appropriate NIOSH approved respiratory protection (P95; P100 for lead with, quantitative fit testing required) if exposures exceed the permissible limits.
- \* The Occupational Safety and Health Administration (OSHA) have set mandatory limits on occupational exposures.
- \* Aluminum, in solid form and as contained in finished products presents no special health risk.
- \* Sold for manufacturing purposes only. This product can be recycled; contact your sales representative.

For additional information, call or write to Copper and Brass Sales,22355 West Eleven Mile Road, Southfield, MI 48033,telephone248-233-5600, or visit our web site @ www.copperandbrass.com.

**ALUMINUM LABEL NO. 300-1056** 

**ISSUED 10/01/2008** 





Constellium Rolled Products Ravenswood, LLC

ΜI





ALFLR00998

COPPER & BRASS SALES 1015 SAINT JEROME STREET MISHAWAKA ΙN

46544

COPPER & BRASS SALES P.O. BOX 5116 SOUTHFIELD

48086

COPPER&BR P28302 4075 INCLUSION SERIAL#: 20130527P28302 PAGE 1 OF 3

CUSTOMER PURCHASE ORDER NO. & ITEM Constellium ORDER NO. 5400179097 110-513091 ALLOY TEMPER GAUGE WIDTH LENGTH 7075 00 T651 1.53000 60.500 144.500 ITEM ORDERED MOLD PLATE-DIST GE SPEC PLATE, SAWED MILL CUSTOMER SPECIFICATION AMS-QQ-A-250/12 PART NUMBER B/L NUMBER

DATE SHIPPED P28300 05/28/13

WEIGHT SHIPPED NO. OF PIECES GOVT, CONTRACT NO. 8,520 6

### CERTIFICATION

"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."

Constellium Rolled Products Ravenswood, LLC Rt 2 South, Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA

	LOT IMBER	TEST DIRECTIO	NO. OF		ULTIMATE	STREN	3TH K.S.I.		YIELD	STRENG	TH K.S.I.		ELON	ATION	1%		COND	% I.	ACS
NU	IMBER	DIRECTIO	N TESTS		MIN.		MAX.		MIN.		MAX.		MIN.		MAX.	1	MIN	MA.	X
388	8201	LT	2	- 1	*** T6	- 1	81.1		70.4		70.9		*** 13.5		13.5				
ì	All n	nater	ial c	dnt	tained	lii	n lot	38	88201	was	cast	an	d manu	fac	ture	d i	n the	US	Α.
40:	1811	LT	2		.80.7		80.9		70.4		70.4		13.0		13.5	nee nee we'd .			<del></del>
ī.	All n	ater	ial c	ont	tained	d i.r	n lot	40	)1811	was	cast	an	d manu	fac	ture	d i	n the	US	Α.
Ĩ.	ALL I	OTS	ON TH	IS	CERT]	FIC	CATIO	N A	ALSO C	ONF	ORM TO	) T 	HE FOL	LOW	VING	REQ!	JIREM	ENT	S -
			AM.	S 4	4045K	ANI	) AST	МЕ	3209-1	.0									
	411011	SILICO	N T	IR	RON	COF	PER		NGANESE	MAG	NESIUM	CHR	OMIUM	ZIN	NC	TITA	ANIUM	ОТН	ERS
C H E	ALLOY	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	EACH MAX.	TOTAL MAX.
NA I	EE AC	TUAL	CHEM	IC?	AL COM	IPOS	SITIC	N									,		
۲					<del>                                     </del>		L		ALUN	MINUM RE	MAINDER				<u> </u>	<u> </u>			

P-860-155D (06/11)

Wgt.: 197.000 LB

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD

Del.: 2402583664

CstAr

CstOr 250159

Date 07/13/2013

John Bunbeth





Constellium Rolled Products Ravenswood, LLC

COPPER & BRASS SALES 1015 SAINT JEROME STREET MISHAWAKA

LENGTH

DATE SHIPPED

05/28/13

144.500

COPPER & BRASS SALES P.O. BOX 5116 SOUTHFIELD

SERIAL#: 20130527P28302

MI

PAGE

2 OF

3

46544

CUSTOMER PURCHASE ORDER NO. & ITEM

MOLD PLATE-DIST GE

SPEC PLATE, SAWED

AMS-QQ-A-250/12

8,520

00

COPPER&BR

5400179097

CUSTOMER SPECIFICATION

ALFLR00998

ALLOY

7075

ITEM ORDERED

PART NUMBER

WEIGHT SHIPPED

P28302 4075

TEMPER

T651

NO. OF PIECES

INCLUSION

WIDTH

GAUGE

MILL

B/L NUMBER

6

1.53000

P28300

GOVT, CONTRACT NO.

Constellium ORDER NO.

60.50d

110-513091

48086

"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are

CERTIFICATION

on file, subject to examination."

Constellium Rolled Products Ravenswood, LLC
Rt 2 South, Century Road
P.O. BOX 68
RAVENSWOOD, WV 26164 USA

1	odne	y I.	Fe	lty
7	Rodney J. Felt	<ul> <li>Laborat</li> </ul>	ory Manag	107

LOT NUMBER	TEST DIRECTION	NO. OF TESTS	ULTIMATI	STREN	GTH K.S.I.		YIELD S	TRENGT	H K.S.I.		ELON	NOITAE	%	f		8 I.	
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From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD Del.: 2402583664

CstAr CstOr 250159

Wgt.: 197.000 LB

Date 07/13/2013

John Bambeth





Constellium Rolled Products Ravenswood, LLC

COPPER & BRASS SALES 1015 SAINT JEROME STREET MISHAWAKA ΙN

P.O. BOX 5116 SOUTHFIELD

COPPER & BRASS SALES

MT

PAGE

3

3 OF

46544

P28302 4075

INCLUSION

48086

CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are

on file, subject to examination."

Constellium Rolled Products Ravenswood, LLC Rt 2 South, Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA

COPPER&BR SERIAL#: 20130527P28302 CUSTOMER PURCHASE ORDER NO. & ITEM Constellium ORDER NO. 5400179097 110-513091 ALLOY TEMPER GAUGE WIDTH LENGTH 7075 00 1.53000 T651 60.50d 144.500 ITEM ORDERED MOLD PLATE-DIST GE SPEC PLATE, SAWED MILL CUSTOMER SPECIFICATION AMS-QQ-A-250/12 PART NUMBER B/L NUMBER DATE SHIPPED ALFLR00998 P28300 05/28/13 WEIGHT SHIPPED NO. OF PIECES GOVT. CONTRACT NO. 6 8,520

NUMBER	TEST	NO. OF	ULTIMATE S	TRENGTH K.S.I.		YIELD STREN	GTH K.S.I.	EL	ONGATION	√%	CON	D &	
	DIRECTION	TESTS	MIN.	MAX.	MI	N.	MAX.	MIN.		MAX.	MIN	M	AX
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Wgt.: 197.000 LB

From: ThyssenKrupp Materials NA

Cust. THYSSENKRUPP MATERIALS NA - ECAD

Del.: 2402583664

CstAr

CstOr 250159

Date 07/13/2013

John Bambetts

FORM: 1006

## **WORKORDER:**

2402583664

# **COPPER AND BRASS SALES**

**MATERIAL TYPE** 

# ALUMINIUM ALLOYS

## PRODUCT DESIGNATION

2014 2024 2224 2324 7050 7075 7150 7175 7475 ALUMEC 89 ALUMEC 99 QC-7

### "WARNING"

SMALL CHIPS, FINE TURNINGS AND DUST MAY IGNITE READILY. EXPLOSION POTENTIAL MAY BE PRESENT WHEN; DUST OR FINES ARE DISPERSED IN THE AIR; FINE, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH CERTAIN METAL OXIDES; OR, CHIPS, FINES, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH WATER OR MOISTURE. KEEP AWAY FROM IGNITION SOURCE. USE EXPLOSION-PROOF VENTILATION. KEEP MATERIAL DRY.

THIS PRODUCT CONTAINS BERYLLIUM AND COPPER.INHALING BERYLLIUM DUST OR FUMES MAY CAUSE CHRONIC BERYLLIUM DISEASE (CBD), A SERIOUS CHRONIC LUNGDISEASE IN SOME INDIVIDUALS.BERYLLIUM IS A CANCER HAZARD; OVER TIME CBDAND CANCER CAN BE FATAL, TARGET ORGAN IS PRIMARILY THE LUNG.INHALING LARGE AMOUNTS OF COPPER, MAGNESIUM OXIDE, MANGANESE OXIDE, ANDZINC OXIDE FUMES OR DUST MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS. CHRONIC OVEREXPOUSURE TO COPPER MAY CAUSE THICKENING OF THE SKIN; AND SKIN, TEETH, AND HAIR DISCOLORATION. CHRONIC OVEREXPOUSURE TOMANGANESE DUST CAN CAUSE CENTRAL NERVOUS SYSTEM DAMAGE, SCARRING OF THELUNGS AND REPRODUCTIVE HARM IN MALES. TARGET ORGAN IS PRIMARILY THE LUNG, BUT REPEATED HIGH EXPOSURE CAN ALSO AFFECT THE LIVER. CHRONICOVEREXPOSURE TO IRON OXIDE DUST/FUME MAY CAUSE LUNG SIDEROSIS. CHRONIC OVEREXPOSURE TO SILICON DUST CAN CAUSE CHRONIC BRONCHITIS. OVEREXPOSURE TO AMORPHOUS SILICA CAN CAUSE DRYING OF THE MUCOUSMEMBRANES OF THE EYES, NOSE, AND THROAT.

THIS PRODUCT ALSO CONTAINS NICKEL AND CHROMIUM COMPOUNDS.INHALATION OF NICKEL DUST OR FUME MAY RESULT IN INFLAMMATION OF THE RESPIRATORY TRACTAND CAUSE NASAL AND/OR LUNG CANCER.NICKEL HAS BEEN IDENTIFIED AS A POTENTIAL HUMAN CARCINOGEN.EXPOSURE TO CHROMIUM DUST OR FUMES MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS AND KIDNEY AND LIVER DAMAGE.UNDER HIGH TEMPERATURES,HEXAVALENT CHROMIUM MAY BE PRODUCED,IF IN THEINSOLUBLE FORM,IT IS A CONFIRMED HUMAN CARCINOGEN.(CALIFORNIA PROPOSITION 65).

IF COATED WITH OIL, MAY CAUSE SKIN IRRITATION/DERMATITIS BY CONTACT. WELDING FUME IS LISTED AS A POSSIBLE CARCINOGENIC TO HUMANS.

READ THE ALUMINIUM/ALUMINIUM ALLOYS MATERIAL SAFETY DATA SHEET (MSDS) ON FILE WITH YOUR EMPLOYER BEFORE WORKING WITH THIS MATERIAL.

- \* If processing or recycling produces particulate, use exhaust ventilation or other controls designed to prevent exposure to workers. Examples of such activities include melting, welding, grinding, abrasive sawing, sanding and polishing. Any activity which abrades the surface of this material can generate airborne particulate. Use appropriate NIOSH approved respiratory protection (P95; P100 for lead with, quantitative fit testing required) if exposures exceed the permissible limits.
- \* The Occupational Safety and Health Administration (OSHA) have set mandatory limits on occupational exposures.
- \* Aluminum, in solid form and as contained in finished products presents no special health risk.
- \* Sold for manufacturing purposes only. This product can be recycled; contact your sales representative.

For additional information, call or write to Copper and Brass Sales,22355 West Eleven Mile Road, Southfield, MI 48033,telephone248-233-5600, or visit our web site @ www.copperandbrass.com.

**ALUMINUM LABEL NO. 300-1056** 

ISSUED 10/01/2008

Del.

· Fram:

ThyssenKrupp

Cust.

THYSSENKRUPP MATERIALS

## Constellium



INCLUSION
Constellium ORDE

## **CERTIFIED TEST REPORT**

Constellium Rolled Products Ravenswood, LLC

COPPER & BRASS SALES 1015 SAINT JEROME STREET MISHAWAKA IN

COPPER & BRASS SALES P.O. BOX 5116 SOUTHFIELD

48086

SERIAL#: 20130522P12604

PAGE

46544

CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard

General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC
Rt 2 South, Century Road
P.O. BOX 68
RAVENSWOOD, WV 26164 USA

COPPER&BR P12604 4075

USTOMER PURCHASE ORDER NO. & TTEM

5400179097 110-513097 WIDTH LE 7075 00 T651 4.00000 60. MOLD PLATE-DIST GE SPEC PLATE, SAWED S-QQ-A-250/12 DATE SHIPPED ALFLR00369 P12600 05/24/13 NO. OF PIECES GOVT. CONTRACT NO.

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P-860-155D (06/11)

COMP

Frem:

ThyssenKrupp

Cust.

THYSSENKRUPP MATERIALS

ECAD

## Constellium



## CERTIFIED TEST REPORT

Constellium Rolled Products Ravenswood, LLC

COPPER & BRASS SALES 1015 SAINT JEROME STREET IN

COPPER & BRASS SALES P.O. BOX 5116 SOUTHFIELD MI

20130522P12604

48086

MISHAWAKA 46544

DCOPPER&BR P12604 4075 ION SERIAL#: INCLUSION 5400179097 ALLOY CLAD 110-513097 TEMPER GAUGE ω**7075** 00 T651 4.00000 60.500 500 HEM ORDERED MOLD PLATE-DIST GE 07/20 SPEC PLATE, SAWED MILI AMS-QQ-A-250/12 DATE SHIPPED FLR00369 P12600 GOVT. CONTRACT NO. 05/24/13 NO. OF PIECES 3

CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."

PAGE

2 OF

Constellium Rolled Products Ravenswood, LLC Rt 2 South, Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA

	LOT NUMBER	TEST DIRECTION		IO, OF		ULTIMAT	E STRI	ENGTH K.S.I		YI	ELD STRE	NGTH I	(.8.1.		ELON	IGATION	%	<u> </u>	COND	% I	AC:
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ALUMINUM REMAINDER



P-860-155D (06/11)

Fram: Cust.

ThyssenKrupp

THYSSENKRUPP MATERIALS

Del.: 2402583663



## CERTIFIED TEST REPORT

Constellium Rolled Products Ravenswood, LLC

COPPER & BRASS SALES P.O. BOX 5116 SOUTHFIELD MI

48086

COPPER & BRASS SALES 1015 SAINT JEROME STREET MISHAWAKA IN 46544

PLOOPER&BR P12604 4075 INCLUSION SERIAL#: 20130522P12604 DISTOMEN FUNCHASE OF 10-513097 GAUGE ∞7<u>075</u> 00 T651 4.00000 60.500 144.500 MOLD PLATE-DIST GE PLATE, SAWED MIL -QQ-A-250/12 B/L NUMBER DATE SHIPPED FLR00369 P12600 05/24/13

CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination,"

PAGE

3 OF

Constellium Rolled Products Ravenswood, LLC
Rt 2 South, Century Road
P.O. BOX 68
RAVENSWOOD, WV 26164 USA

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P-860-155D (06/11)